

GENERAL INFORMATION (13 Feb 01)

Web site for this course: <http://d01bln.lbl.gov/110bs01-web.htm> .

Instructors: Prof. **Mark Strovink**, 437 LeConte; (LBL) 486-7087; (home, before 10) 486-8079; (UC) 642-9685. Email: strovink@lbl.gov . Web: <http://d01bln.lbl.gov> . Office hours: M 3:15-4:15, 5:30-6:30.

Mr. **Gesualdo Riday**, 279 LeConte, (UC) 642-5647. Email: gesualdo_riday@yahoo.com . Office hours (in 279 LeConte): W 3-4, Th 2-3.

Lectures: MWF 10:10-11:00 in 343 LeConte, and Tu 5:10-6:30 in 308 LeConte. The Tu 5:10-6:30 slot will be used occasionally during the semester for the midterm exam; for reviews and special lectures; and for lectures that substitute for those which would normally be delivered on F 10:10-11:00. Lecture attendance is strongly encouraged, since the course content is not exactly the same as that of the texts.

Discussion Sections: Tentatively M 1:10-2 in 331 LeConte, and W 5:10-6 in 5 Evans. Begin in second week. Taught by Mr. Riday. You are especially encouraged to attend discussion section regularly. There you will learn techniques of problem solving, with particular application to the assigned exercises.

Texts:

- Griffiths, **Introduction to Electrodynamics** (3rd ed., Prentice-Hall, 1999, required). Probably you already bought this book for 110A. If not, get the fourth (or later) printing, which has fewer typos. Most of you have already formed an opinion about this text, which I feel is well written and pedagogically effective, though its scope is modest and its problems are sometimes not very physical.
- Pedrotti & Pedrotti, **Introduction to Optics** (2nd ed., Prentice-Hall, 1993, required). There is no uniform choice of optics text for this course. Hecht, **Optics**; Fowles, **Introduction to Modern Optics**; and, for a heavy-duty treatment, Klein & Furtak, **Optics** all have been used in various incarnations of 110B.
- If you are planning to attend physics graduate school, it would be smart now to purchase Jackson, **Classical Electrodynamics** (3rd ed., Wiley). Optionally, it can be useful in this course.
- Optionally, Taylor & Wheeler, **Spacetime Physics** (Freeman, 1966, paperback) can be useful for the portion of this course that is devoted to special relativity.

Problem Sets: A required and most important part of the course. Twelve problem sets are assigned and graded. Problem sets are due on Thursdays at 5 PM, beginning in week 2. Deposit problem sets in the box labeled "110B Section 1 (Strovink)" in the second floor breezeway between LeConte and Birge Halls. You are encouraged to attempt all of the problems. Students who do not do so find it almost impossible to learn the material and to succeed on the examinations. Late papers will not be graded. Your lowest problem set score will be dropped, in lieu of due date extensions for any reason. You are encouraged to discuss problems with others in the course, but you must write up your homework by yourself. (In a small class it is straightforward to identify solutions that are written collectively; our policy is to divide the score among the collectivists.)

Exams: There will be one 80-minute midterm examination and one 3-hour final examination. Before confirming your enrollment in this class, please check that its final Exam Group 6 does not conflict with the Exam Group for any other class in which you are enrolled. Please verify now that you will be available for the midterm examination on Tu 20 Mar, 5:10-6:30 PM; and for the final examination on M 14 May, 8-11 AM. Except for unforeseeable emergencies, it will not be possible for the midterm or the final exam to be rescheduled. Passing 110B requires passing the final exam.

Grading: 25% problem sets, 25% midterm, 50% final exam. Departmental regulations call for an A:B:C distribution in the ratio 2:3:2, with approximately 10-15% D's or F's. However, the fraction of D's or F's depends on you; no minimum number need be given.